

# **The 'death' of small and medium firm jobs in South Africa**

Neil Rankin

Stellenbosch University

August 2017

Something is going on...



And I'm not sure many people know about it

1. There are far fewer small and medium jobs in South Africa than we thought!

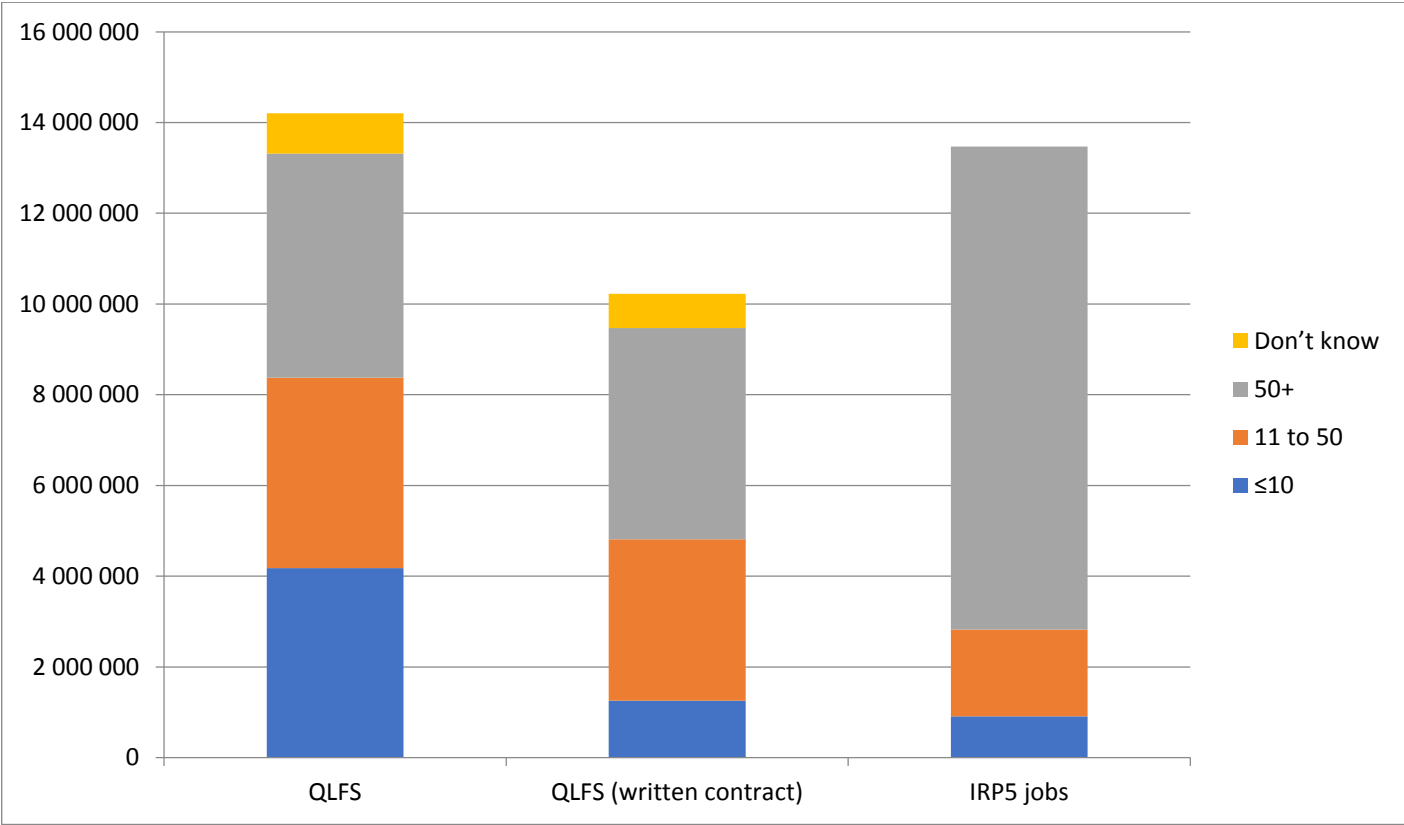
2. And they are disappearing!

# Why should we care?

- Policy: The NDP foresees that the bulk of new jobs required to meet its targets for 2030 will come from small and medium firms
- We need jobs: Stagnant (increasing) unemployment rates
- For the type of unemployment we have: Small firms are 'natural' entry point into the labour market
- International evidence: up and out pattern of firm growth (Haltiwanger et al).

# The evidence: Exhibit A – actual numbers

## Employment and job numbers (2015)



## Exhibit B – net job creation and destruction

Table 6: JOB CREATION AND DESTRUCTION BY SIZE CATEGORY

Size Category	Weighted Emp Share	JC	JD	Birth	Contrib to JC	Death	Contrib to JD
1-19	16.2	10.1	14.3		11.8		34.4
20-49	15.6	12.2	12.2		12.7		33.3
50-99	11.2	9.7	13.0		5.5		22.3
100-249	10.3	9.6	11.3		7.2		28.3
250-499	6.1	10.4	10.9		9.2		26.9
500-999	5.9	11.2	8.6		10.0		16.0
1000-2499	7.3	11.1	8.3		11.0		16.9
2500-4999	6.4	12.5	6.9		10.9		11.8
5000+	20.9	6.7	4.0		10.3		7.1
<b>Manufacturing Only</b>							
1-19	12.9	9.6	13.5		9.4		32.7
20-49	14.7	9.9	11.5		9.1		31.4
50-99	13.1	9.1	10.4		8.1		25.9
100-249	16.0	9.4	10.4		7.5		28.3
250-499	11.1	8.1	8.8		7.1		22.9
500-999	7.6	9.2	8.1		9.6		18.9
1000-2499	10.0	7.5	7.2		14.8		10.0
2500-4999	6.6	9.5	7.5		21.4		6.6
5000+	8.0	6.0	5.4		13.9		0.0

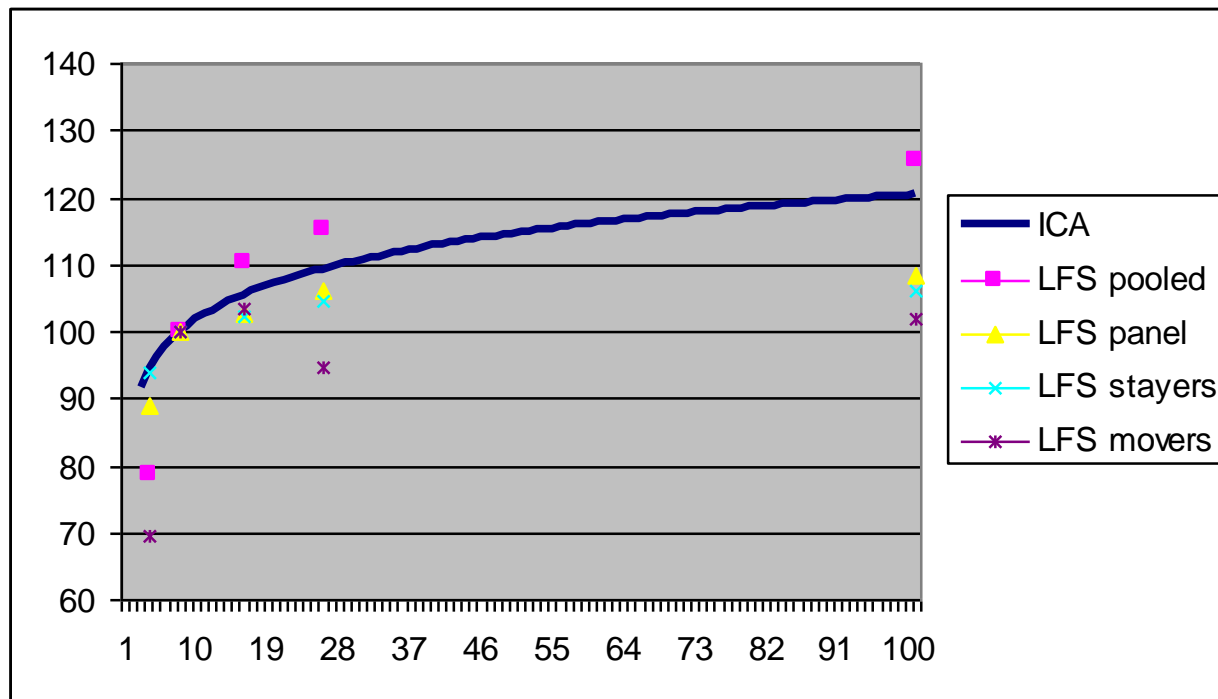
Source: own calculations from QES. These are weighted results.

Source: Kerr et al, 2013

# Exhibit C – the firm-size earnings relationship

What it used to look like (and looks like in other countries)

## Predicted firm size-earnings relationship (late 90s and early 2000s)



Note: Number of employees in the firm is assumed to be the middle of the LFS categories.

What it looks like now

### Median monthly wages by firm size category (2015): SARS data



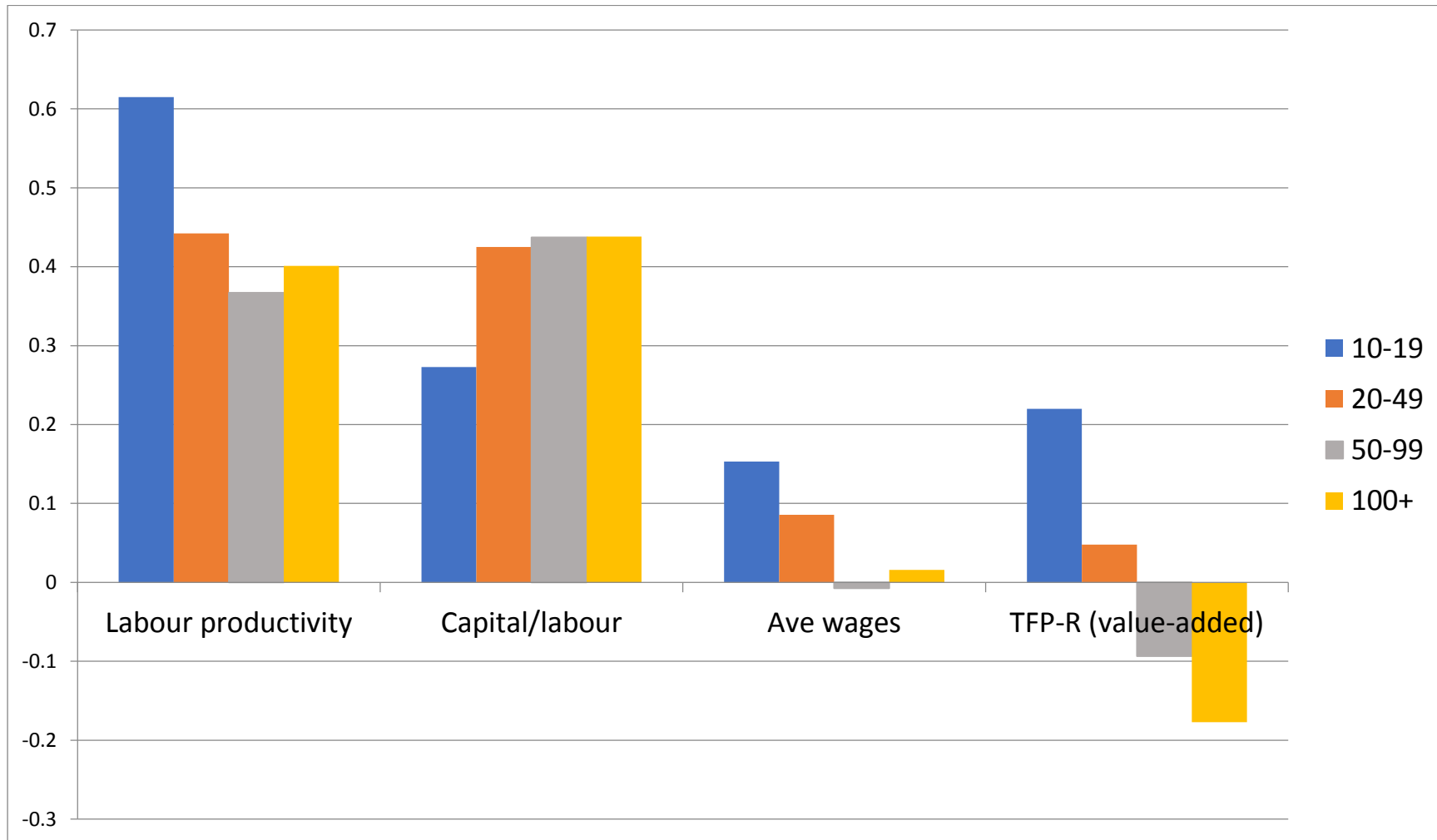


## Exhibit D: Types of South African manufacturing firms (Webb and Rankin, 2017)

**Table 3.** Median Values of Variables in each Cluster for LSS 2005 and 2008 datasets

<i>Clusters</i>		<b>Variables (Performance Indicators)</b>											<i>Freq.</i>	<i>% sample</i>
		<b>LSS - 2005</b>												
		<i>med_large</i>	<i>exporter</i>	<i>lryl</i>	<i>ll</i>	<i>lrkl</i>	<i>lril</i>	<i>ln_TFP</i>	<i>lrwl</i>	<i>exp_sales_p</i>	<i>common_sic3</i>			
Cluster 1	<i>Small Exporters</i>	0	1	5.59	3.14	3.28	5.21	0.02	1.12	6.48	356	150	4.71	
Cluster 2	<i>Medium/large Non-exporters</i>	1	0	6.44	4.70	4.03	6.18	0.03	-0.34	0.00	338	1506	47.24	
Cluster 3	<i>Regular Medium/Large Exporters</i>	1	1	6.34	4.83	4.18	6.06	0.02	-0.28	7.50	338	734	23.02	
Cluster 4	<i>High-performing Medium/large Exporters ("super exporters")</i>	1	1	8.97	3.88	8.11	8.96	0.22	1.65	80.43	343	8	0.25	
Cluster 5	<i>Regular Small Non-exporters</i>	0	0	5.36	2.82	3.25	5.03	-0.03	1.11	0.00	351	785	24.62	
Cluster 6	<i>High-performing Small Non-exporters ("high technology firms")</i>	0	0	8.84	0.11	6.94	8.74	0.20	5.24	0.00	335	5	0.16	
		<b>LSS - 2008</b>												
		<i>med_large</i>	<i>exporter</i>	<i>lryl</i>	<i>ll</i>	<i>lrkl</i>	<i>lril</i>	<i>ln_TFPI</i>	<i>lrwl</i>	<i>exp_sales_p</i>	<i>common_sic3</i>	<i>Freq.</i>	<i>% sample</i>	
Cluster 1	<i>Small Exporters</i>	0	1	5.68	3.29	3.58	5.28	-0.02	1.13	4.41	354	283	4.65	
Cluster 2	<i>Medium/large Non-exporters</i>	1	0	5.99	3.87	3.59	5.60	0.00	0.44	0.00	342	2923	48.08	
Cluster 3	<i>Regular Medium/Large Exporter</i>	1	1	6.12	4.25	4.11	5.77	-0.01	0.31	4.44	351	2862	47.07	
Cluster 4	<i>High-performing Medium/large Exporters ("super exporters")</i>	1	1	8.74	1.70	3.29	8.77	0.40	4.20	86.27	355	8	0.13	
Cluster 5	<i>Low-performing Large Non-exporters</i>	1	0	0.90	7.40	-1.08	1.99	-1.78	-4.58	0.00	313	2	0.03	
Cluster 6	<i>Small "super-exporters"</i>	0	1	8.99	0.86	7.01	9.02	-0.02	5.11	25.16	366	2	0.03	

**Exhibit E: Real labour productivity, capital intensity, cost per worker (average wages) and productivity in manufacturing by firm size. 2008 values relative to 1996**



## **Evidence summary:**

- A. 80% (not one-third) of jobs are in 50+ firms, up from 70%  
10 years ago
- B. Net job destruction in firms <500 employees
- C. Low wage jobs (or firms) seem to be vanishing
- D. Missing small, low labour productivity (and lower wage)  
firms as a cluster
- E. Rising labour productivity in smaller firms

## **What is going on?**

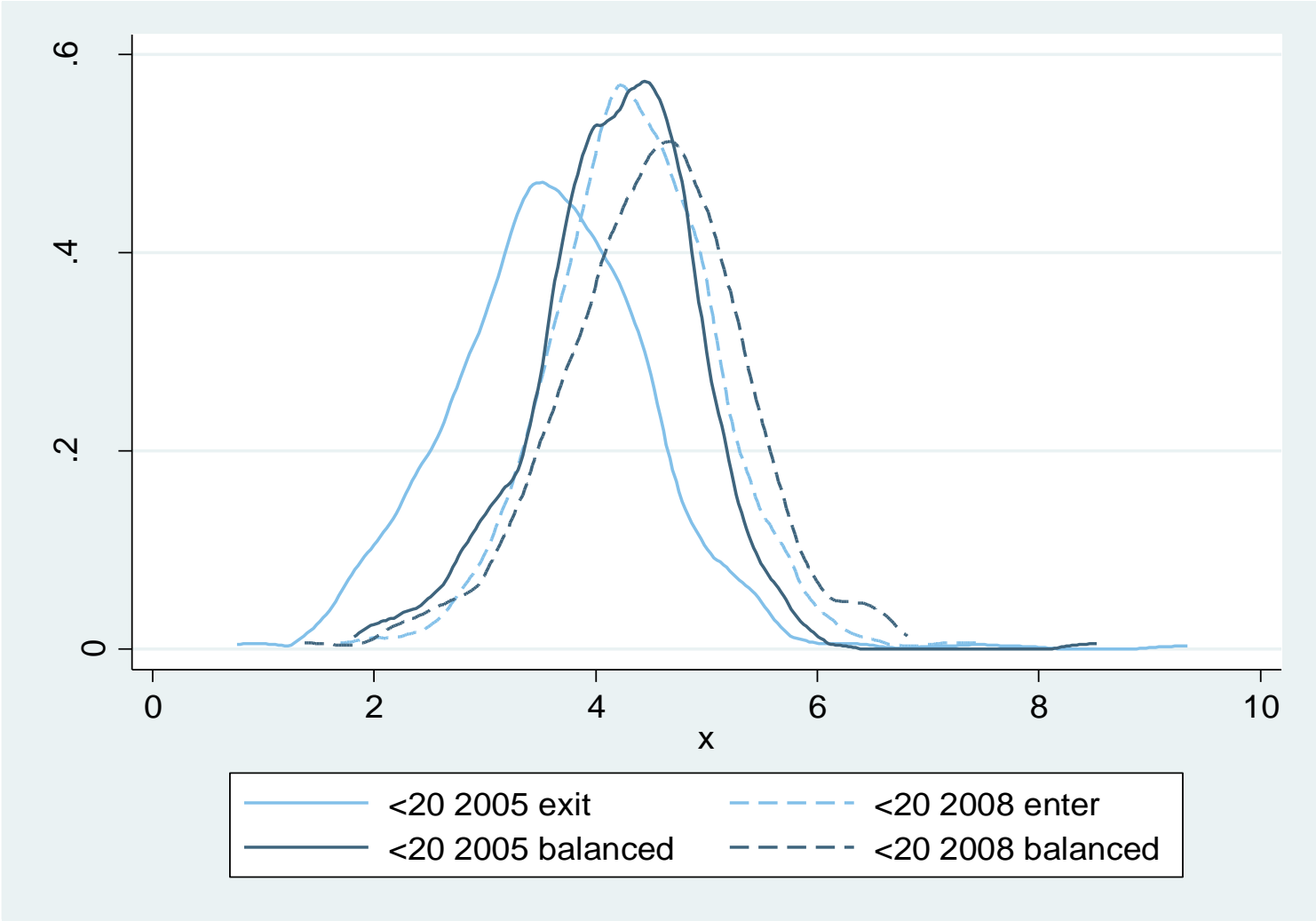
## **Possible explanations:**

- Data?
- Vanishing firms or vanishing jobs?

## Is it the data?

- Kerr et al (2013): Quarterly employment survey (QES), StatsSA
- Job numbers: QES and SARS IRP5
- Wages: SARS, StatsSA's Large Sample Survey (LSS), World Bank surveys
- Clustering of firms: LSS

# Vanishing firms or vanishing jobs? LSS data



# Culprits?



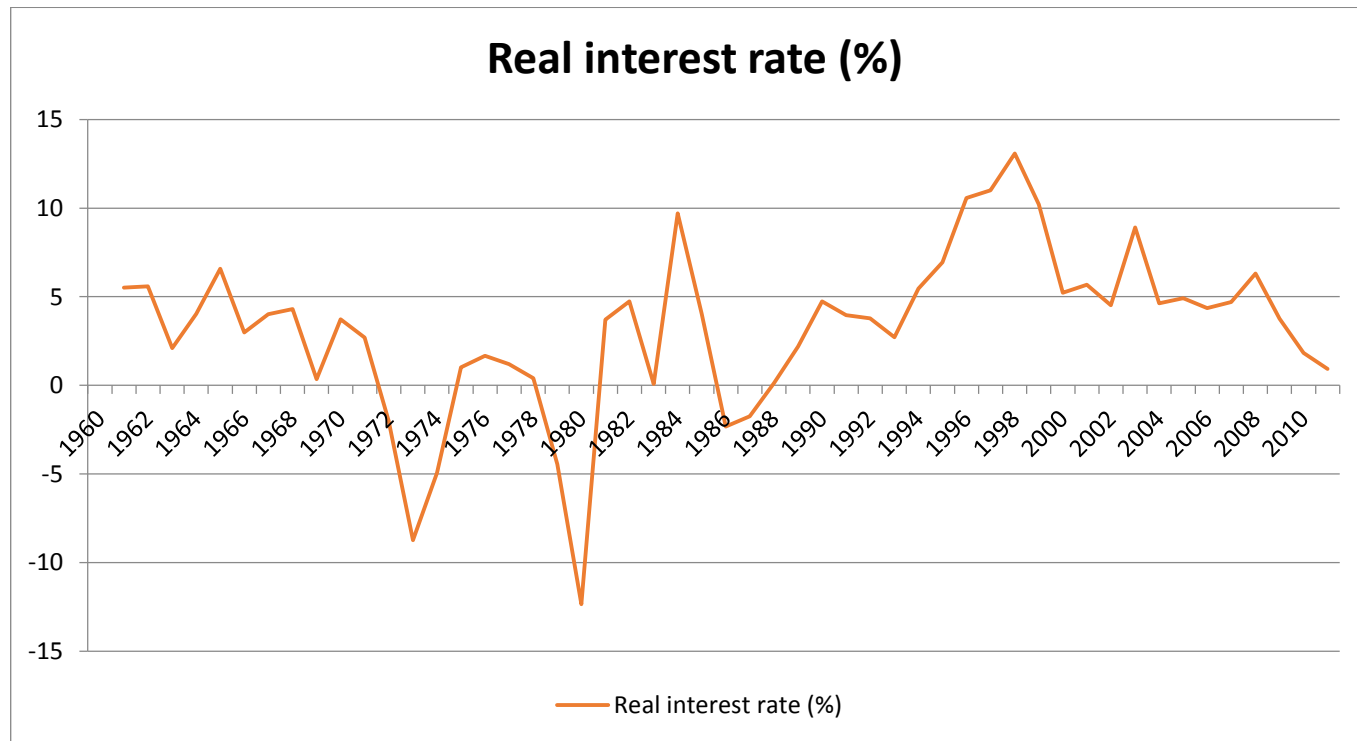
## **Culprits:**

- Technology and relative input prices
- Regulatory environment
  - Labour regulations
  - Bargaining structures
- Trade
- Some combination
- Other

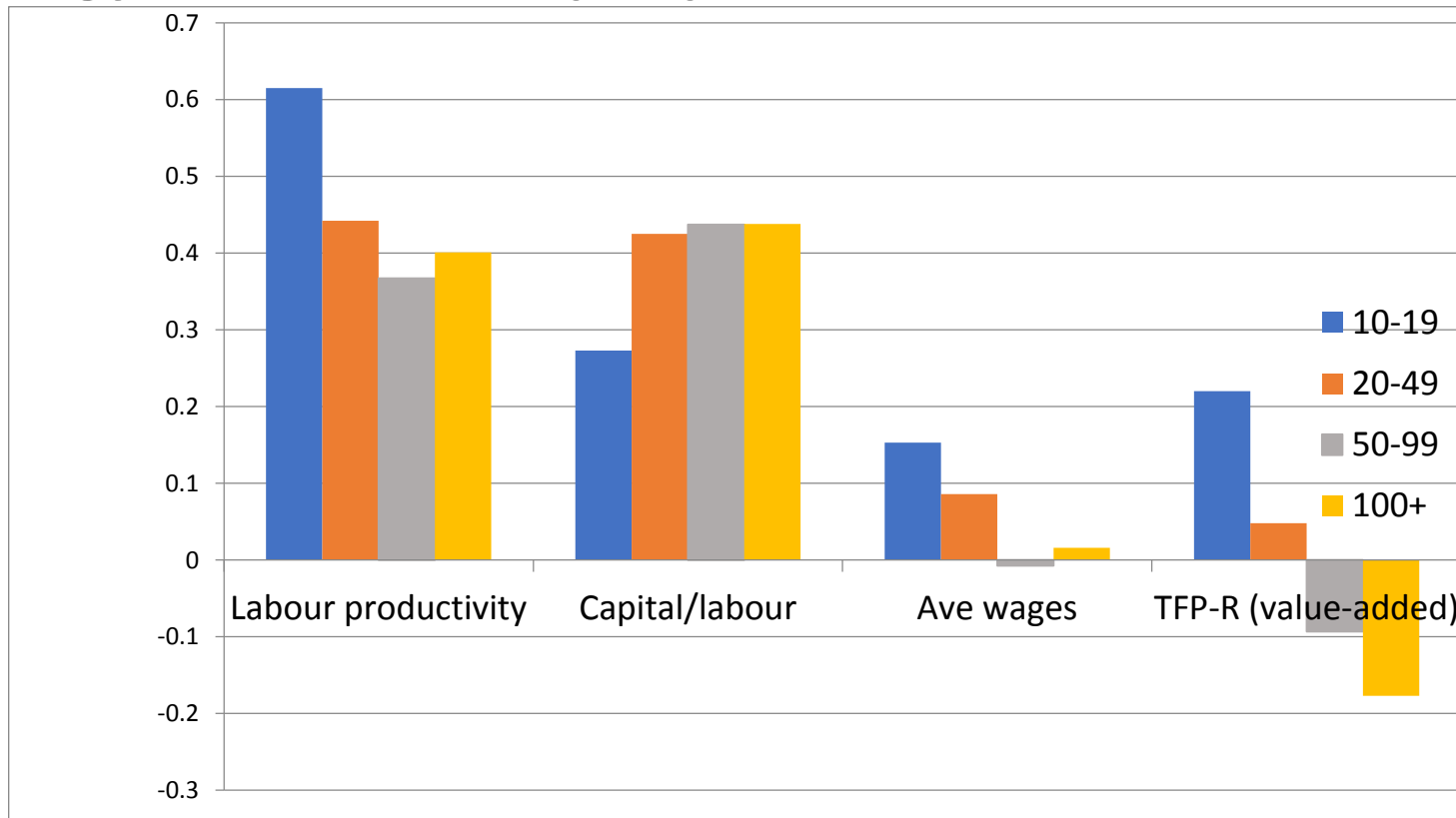


## Suspect 1: Technology and relative input prices

- Capital and labour are substitutes (Behar, 2010, Kreuser and Rankin, 2017)



## Technology and relative input prices

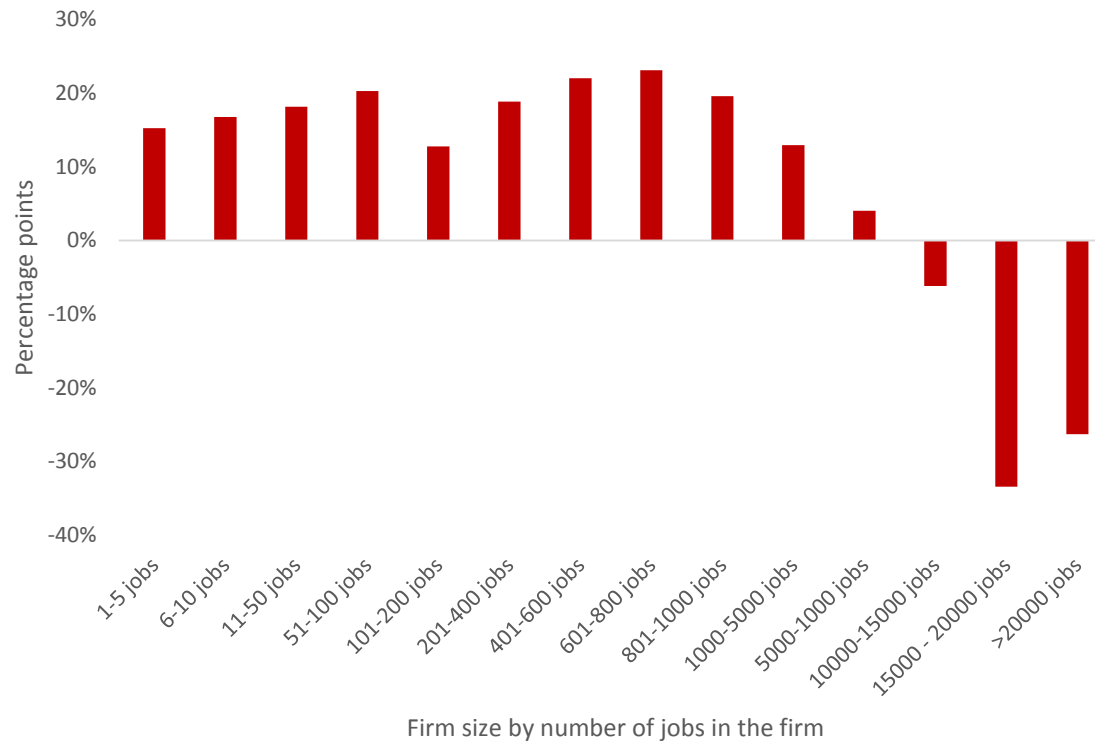


Rather within labour substitutability:

Kreuser and Rankin (2017) – unskilled and managers, or semi-skilled

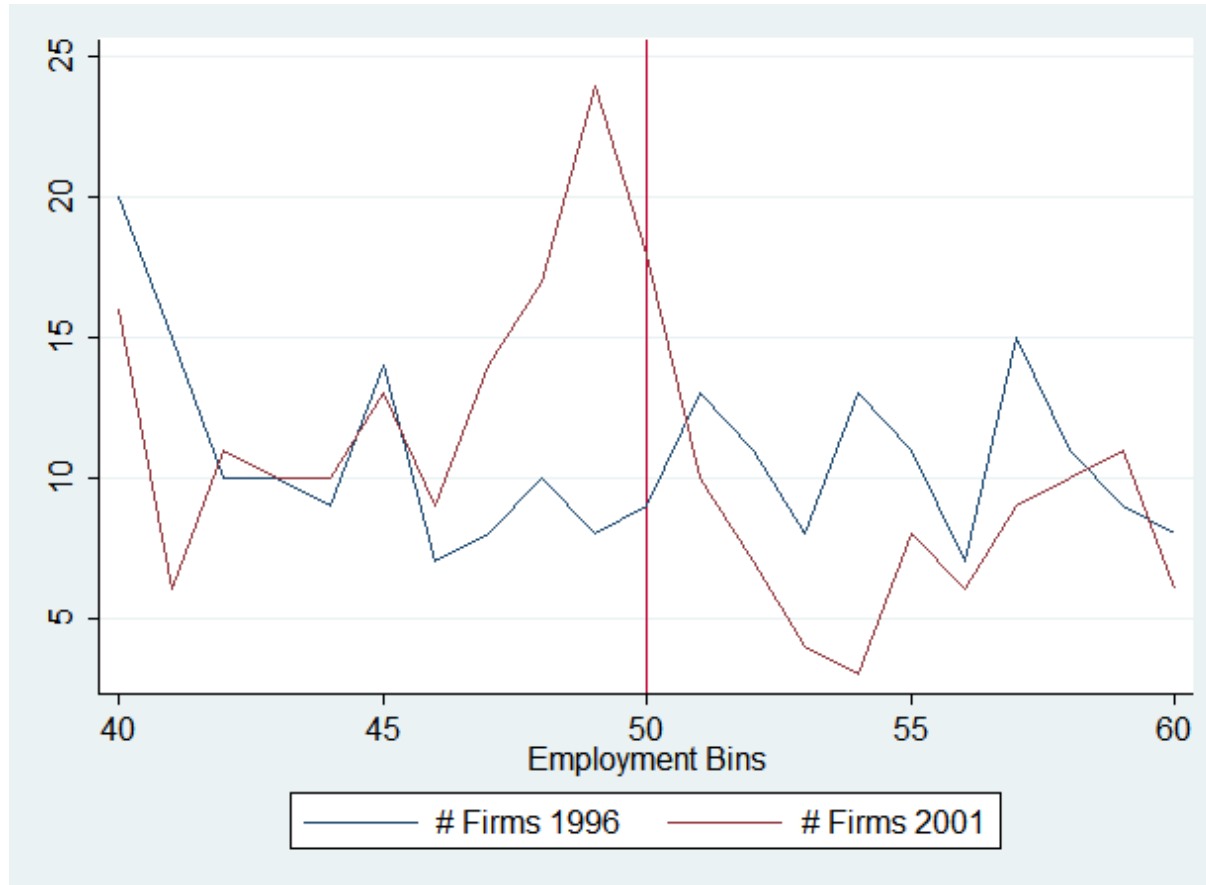
## Wages: impact of the ETI

### Percentage point impact of ETI on employment growth of 18 to 30 year olds earning under R6500 per month in non labour broker firms

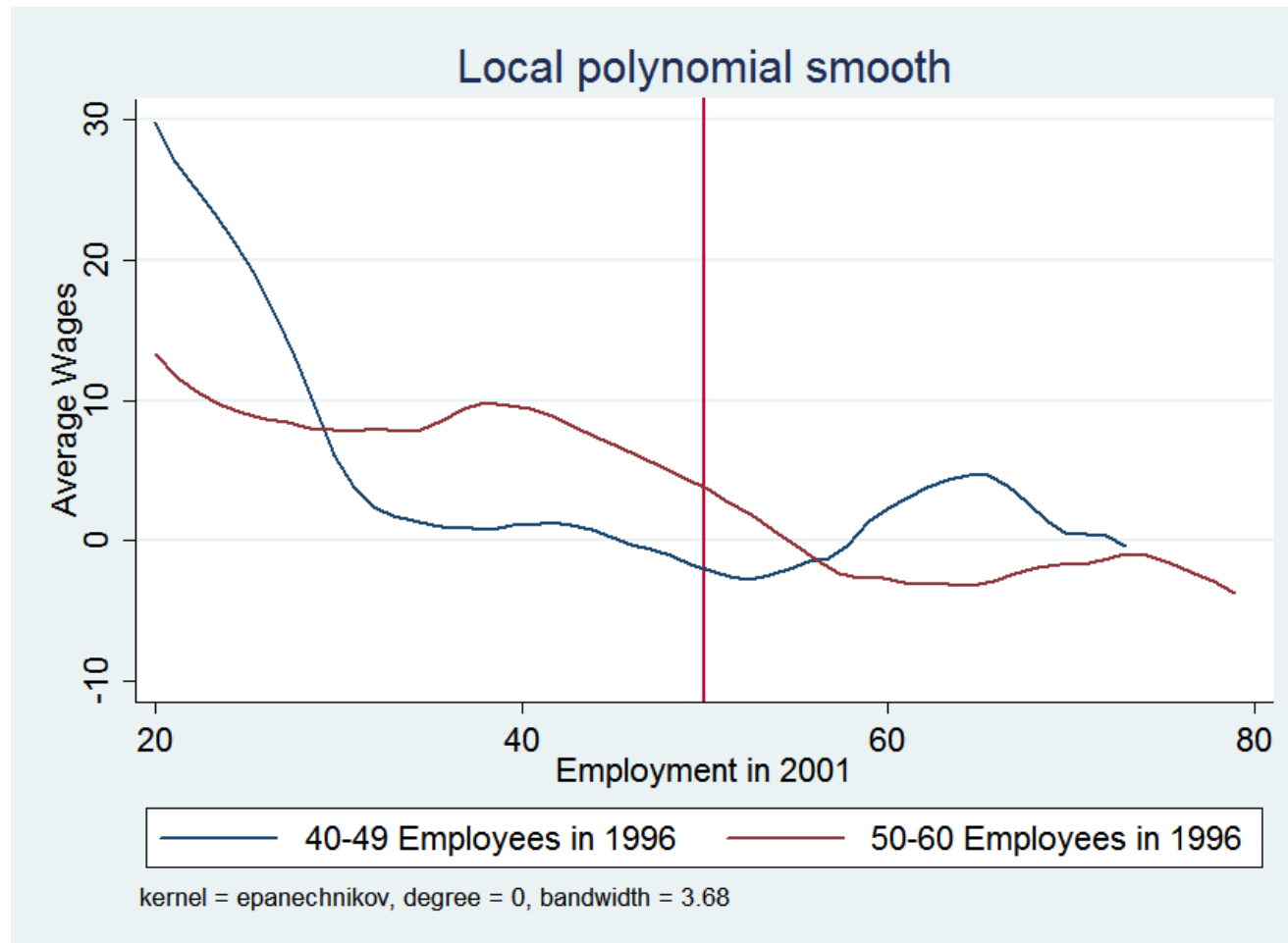


## Suspect 2: Regulatory environment (Flowerday et al, 2017)

Figure 1: Number of firms per employment bracket in 1996, and 2001 (StatsSA, LSS)

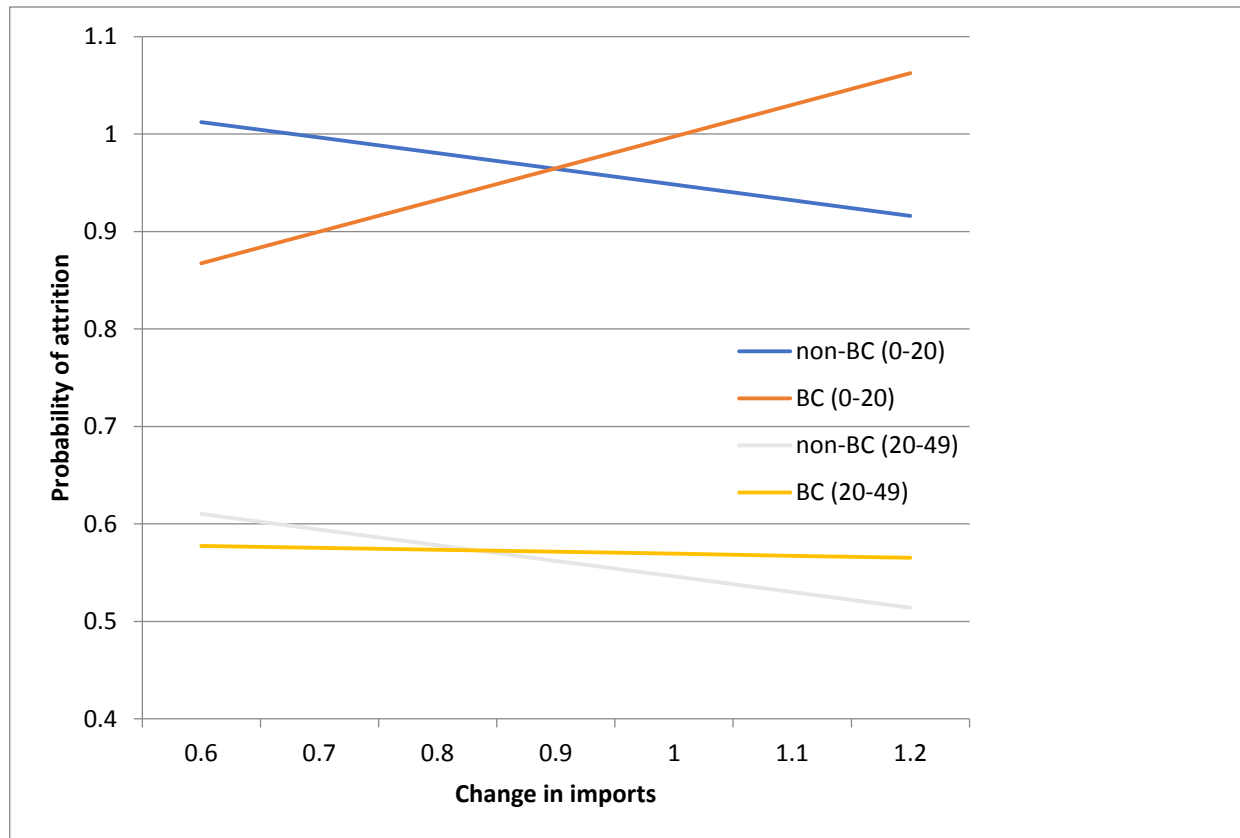


**Figure 4: Average difference in average wages per employee**



## Suspect 2 + 3: Regulatory environment x imports

The probability of attrition by change in imports and firm size



## At least part of the story is about wages and labour productivity

- Rising labour productivity (output per workers)
- At least partly driven by the **EXIT** of smaller firms employing lower skilled workers
- **NOT** compensated by entry of these types of firms
- Seems like the population of small and medium firms is changing to become more skill-intensive
- Associated with:
  - Initial labour intensity
  - Institutional wage setting environment (Bargaining Councils)
  - Import competition
- May be other explanations:
  - Pool of entrepreneurs; Red tape; Reservation wages (transport costs)

Technology (decreasing capital lumpiness?) – capital intensity not increasing

## What does this mean in the South African context?

- If it has to do with relative prices, then:
  - No policies on the horizon to reduce relative price of labour. Coming policies actually increase it:
    - National Minimum Wage
    - Expiry of ETI
  - Low wage jobs have vanished in smaller firms, next step medium firms?
- Constraint is likely to be the types of people who can fill these higher productivity jobs (the semi-skilled)



- Large mass of people who are unemployable given current conditions
  - Welfare system
    - Basic income grants
    - Earned Income Tax Credit
- New small businesses will require ‘skilled’ entrepreneurs
  - Limited scope for entry-level low-skill new businesses unless exempted from regulation

Difficult to see where South African employment growth is going to come from in the next 5 years.